

TREE TALK series

“Propagating Trees”

By James L. Jones

Many of our familiar tree species can be propagated just as readily as can herbaceous perennials, using the same methods, with the added requirement of a bit more patience on the part of the gardener. Where a perennial may reach blooming size in just two years from seed, a tree is more likely to take ten years. However, the rewards begin well before that: as soon as the plant is large enough to be put into the garden without being swallowed up it will provide its own grace notes of form and foliage (and satisfaction, as the gardener watches his or her handiwork increasingly assert its presence year by year).

I've propagated trees by seed, cuttings, and layering, leaving grafting to the experts. I've also benefited from some species self-sowing, taking note at least some of the time that a treasure has sprouted amongst the weeds. I propagate a) for the sheer joy of it; b) to get more of a good thing; and c) to acquire plants that are difficult to find in the trade.

Seeds. Given the eventual size and residency time of tree seedlings, it tends to be more convenient to sow seed in the ground rather than in pots. Ordinary dirt can be used rather than some sort of sterile medium since the seedlings will be clearly distinct from the usual run of weeds. I use a coldframe that is covered in the winter to provide protection from the elements and perhaps from foraging rodents, but I don't think it is

really necessary. More of a necessity is good, permanent labeling or other type of identification.

What might be grown from seed? That is a wide-open question, but I can suggest a couple of considerations: the smaller the ultimate size of a species the sooner it will be likely to start doing its thing, be it flowering or simply looking mature in the landscape; and a species grown for foliage will tend to have garden impact much sooner than one grown for flowers or fruit.

The latter consideration applies to one of my most successful seed-growing subjects: Japanese Maple, *Acer palmatum*. Many years ago I collected seed from a particularly promising tree – red-leaved in the height of summer and not too tall, not too dwarfed.

Germination occurred after a winter's stratification, which means exposure of the seeds to a few months of deep cold, either naturally outdoors, or artificially in the refrigerator. The seedlings grew on for 2-3 years, and when they were 10" saplings they were put into permanent positions. The results were entirely satisfactory, with a whole range of summer leaf colors, from green to red-tinged to thoroughly red. A useful generalization emerged: "the redder the slower," which is just the way I wanted it to be. After some 30 years the reddest one is 10 feet high and wide, with a limited amount of pruning.

Other successes include Silverbell Tree (*Halesia tetraptera*, formerly named *H. carolina*); Korean Dogwood (*Cornus kousa*), and Mimosa (*Albizia julibrissin*). On the other hand, Turkoman Pear (*Pyrus turcomanica*) grew just fine but is not a garden star.

Rare it is, to be sure, but it shot right up to 30 feet, where small white flowers give rise to small, hard, not very tasty fruit.

Layers. In layering, direct advantage is taken of the tree's urge to propagate itself. The technique is simple: a branch is bent so part of it can be buried under an inch of soil and then held in place by, perhaps, weighting it down with a stone. After a season or two, strong growth of the layered branch may indicate that roots have formed. This can be confirmed by a gentle tug. The branch can then be severed from the mother plant inboard of the roots, dug up, and replanted. This is best done when the tree is dormant, in fall or spring.

Bear in mind that layering is only practical if the tree is young enough and small enough that it has ground-reaching branches. If you have a prized plant that is going great guns, move fast! I did it with Japanese Stewartia, *Stewartia pseudocamellia*, some years back, and couldn't do it at this point. Other satisfactory subjects have been Seven-son Flower, *Heptacodium miconoides* and Chinese Juniper, *Juniperus chinensis*, while Leatherleaf Viburnum, *Viburnum rhytidophyllum*, has saved me the bother by layering itself.

Cuttings. I take a straightforward approach to rooting cuttings, simply sticking a 4 to 5" piece of the chosen species in a mix of sand and peat moss in a coldframe that receives only morning sun. In general ripe wood seems to do best, so late summer is my preferred time. Rooting hormone can expand the range of responsive species; more elaborate (and effective) approaches include bottom heat and misting. However, given the limited number of trees that can be squeezed into the average property, the easier types may provide all the plants that can be used.

Among the easiest are the hollies. I particularly like *Ilex glabra*, Inkberry, for its glossy good looks and wonderful prunability. Over the years I've shaped several plants into flat-topped 12' trees that give a fine exotic effect. The Meserve hybrid holly *I. x meservae* has also been responsive, though the finished cuttings seem to take forever to reach any size. Another flattop is *Viburnum plicatum* 'Summer Snowflake', with white flowers through much of the summer.

Self-sowers. We know full well that trees produce seedlings, as we grub out another batch of would-be Norway Maples, but it can still come as something of a surprise when our choice ornamentals do it. In fact, they tend to be somewhat temperamental, requiring specific conditions for seed set and germination (true also for many of our native Oaks). Thus, in one year there may be an onslaught of little Japanese Maples while other springs produce nary a one. Others can be choosier still: in the 17 years that I've had *Heptacodium* it has only spawned once, presumably about seven years ago given the size of the saplings, and indeed 1998's winter began with unusually warm weather coupled with abundant snowfall. *Stewartia* has also been stingy, producing only a seedling or two over the years. *Cornus florida* has been more prolific, while *Albizia* has self-sown to the extent of being a serious weed. I had three *Albizia* but since cross-fertilization may have greatly compounded the problem, I removed two of them (I would hate to banish it from my garden entirely). The jury is still out on whether that will do more than simply cut the number of seedlings to one-third.

It is as much a joy to propagate trees as any other kind of garden plant -- but where to put all those big beautiful progeny? No need to let that concern cramp your propagating style. There will always be a place for them in the gardens of family and

friends or on the sales tables of your local gardening club. And there will always be those extra special species that are available in no other way.

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